



WINTER SQUASH

Health Benefits

- ◆ Winter squash is a good to excellent source of vitamin A, beta-carotene, potassium, vitamin C, and fiber.
- ◆ Winter squash also contains niacin, folate, and iron.
- ◆ One half baked acorn squash counts as $\frac{3}{4}$ cup vegetable.

Fun Facts

- ◆ The word *squash* comes from the Narragansett Native American word askutasquash, which means “eaten raw.” However, winter squash is almost never eaten raw.
- ◆ Besides the fruit, other edible parts of squash plants include the seeds, shoots, leaves, tendrils, and blossoms.

Home Grown History

Winter squash are gourds belonging to the *Cucurbita* genus, the same family summer squash (such as zucchini and cucumbers) belong to. There are several varieties of winter squash, including acorn, butternut, Hubbard, pumpkin, and spaghetti. Winter squash is one of the oldest cultivated crops in the Americas. Seeds found in Mexico have been dated to be 10,000 years old.

In the Americas, squash was one of the three primary crops, the other two being corn and beans. Squash, beans, and corn were known as the “Three Sisters” by some American Indians. These plants were staples to many American Indian tribes. They provided a nutritional balance of carbohydrates, protein, and vitamins. In addition, the corn provided a growing structure for the climbing beans and the bean vines better rooted the corn to the ground so the stalks were not as easily blown over or washed out. The beans fixed nitrogen in the soil to fertilize the corn and squash, and the squash vines acted as living mulch to shade out weed plants and retain moisture in the soil.

European conquerors carried the squash back across the Atlantic. Winter squash never caught on in the more northern parts of Europe though, as the climate was too cool, and the season did not last long enough to properly grow them. France and Spain are two European countries which have embraced the squash and produced many unique varieties.



Student Activities

- ◆ Have students gather their favorite nutritious winter squash recipes. Brainstorm ideas on how to incorporate winter squash into school lunch menus. Have them meet with school nutrition staff to share their ideas.
- ◆ Have students work with your school nutrition staff to set up a display featuring all the varieties of winter squash available.
- ◆ Arrange for the class to work in small groups (3-5 students). Each group creates a recipe for a nutritious snack that use a variety of winter squash. The group members write a recipe for their snack.
- ◆ Ask students to investigate how American Indians used squash. Consider planting a Three Sisters (corn, squash, and beans) garden.

Growing Squash in Wisconsin

Pumpkins and winter squash are among the most popular vine crops in the garden. Since they are vine crops, pumpkins and winter squash “run” on the ground and take up a lot of space. There are bush-type varieties available, which take up less space and allow for more plants per acre.

Winter squash are warm weather plants. These plants can be seeded directly into a garden, however the soil needs to be warm. Therefore, planting usually begins in late May or early June. Many farmers grow winter squash on black plastic. The plastic increases the soil temperature, reduces water evaporation from the soil, and is an effective barrier against weeds.

Winter squash need a 120-day growing season for the fruits to reach maturity. Harvest is usually done by hand to avoid bruising the fruits, and for best flavor and texture, winter squash should be allowed to ripen fully on the vine. In general, once the vines begin to die back and the shells are hard, the squash is ready to harvest. After they are removed from the vine, winter squashes should be cured in a warm, dark location for a week or more prior to being stored.

Winter squash should be stored long term in a cool room at about 55° F. If stored properly, squash is often wonderfully edible even six or more months after harvest, which explains why there are usually nice winter squash for sale at the markets even in July.

Beyond the Classroom

Ask students to visit local grocery stores and observe the variety of winter squash available. Ask students to note where the squash was grown. Invite students to continue observing the winter squash availability throughout the school year.

For More Information:

University of the District of Columbia:
<https://www.udc.edu/docs/causes/online/Winter%20Squash%2018.pdf>

University of Minnesota Extension:
<http://www.extension.umn.edu/garden/yard-garden/vegetables/growing->

Classroom Cooking—Pumpkin Delight

Makes 36 taste test servings (2 Tbsp)

Ingredients:

- 2, 15-oz cans 100% pure pumpkin
- 1 Tbsp honey
- 2 Tbsp of pumpkin pie spice
- 1 sleeve of graham crackers
- Paper plates and forks

Directions:

1. Place pumpkin in a large bowl.
2. Stir spice and honey thoroughly into the pumpkin.
3. Crumble the graham crackers into the pumpkin mixture and stir until evenly distributed (the mixture will be chunky) and serve.

Recipe retrieved from: <http://www.harvestofthemonth.cdph.ca.gov/>



Exploring Wisconsin Squash — Taste Test Activity

What You Will Need:

- 1 pound per group of 8-10 students of three different squash varieties cooked and cubed or mashed. Choose varieties commonly grown in Wisconsin such as acorn, buttercup, butternut, Hubbard, kabocha, or spaghetti squash.
- *Home Grown: Tastes of WI* resource guide
- Taste test survey and pencils

Activity:

- Have students observe, touch, smell, and taste each sample and make notes describing the different tastes. Extend the activity in class by comparing and contrasting the varieties and making a graph showing the likes and dislikes of the class.

